CARLSON
ENVIRONMENTAL, INC.

0000006

January 22, 1999

PN 9786C

Mr. Marc Cummings, Project Manager
State Remediation Program
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62702

Reference: **Revised Proposal for Additional Subsurface Soil and Ground Water Investigation**
The Company Lockformer
711 Ogden Avenue
Lisle, Illinois

Dear Marc:

Pursuant to our recent phone conversation today and on behalf of The Lockformer Company, please find enclosed pages 1 through 7 of the Revised Proposal for Additional Subsurface Soil and Ground Water Sampling at the referenced property. Also find enclosed accompanying drawings and soil and ground water tables that I believe will allow you to review the scope of work.

Field work for the scope of work will begin Monday, February 1, 1999. Please feel free to visit the site at any time during field activities. In the meantime and upon reviewing the enclosed scope of work, if you feel that additional sampling and/or other activities are necessary or required, please contact me as soon as possible and CEI will incorporate the activities.

In general, sampling will begin in the parking lot with a GeoProbe, then proceed to deeper depths in the parking lot. Next, deeper sampling in the vicinity of B-125 will take place and lastly, the monitoring wells will be installed.

If you have any questions or would like additional information, please feel free to contact me at (312)456-4872.

Sincerely,

CARLSON ENVIRONMENTAL, INC.

Lisa Meagher, P.G.
Senior Project Manager

cc: Rian Scheel, Lockformer
Dan Biederman, Chuhak & Tecson

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312 West Randolph Street • Chicago Illinois 60606 • Tel: (312) 346-2140 Fax: (312) 346-6956

CARLSON
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January 21, 1999 P-6918

The Lockformer Company
% Mr. Daniel J. Biederman
Chuhak & Tecson, P.C.
255 West Washington Street
Suite 1300
Chicago, Illinois 60606-3418

Subject: **Revised Proposal for:**
Task 2 Additional Subsurface Soil and Ground Water Investigation
711 Ogden Avenue and Adjacent Vacant Lot
Lisle, Illinois

Dear Mr. Biederman:

Carlson Environmental, Inc. (CEI) welcomes the opportunity to provide The Lockformer Company (Client) with this proposal for environmental services at the above-referenced site. The Client shall be subject to the Terms and Conditions contained in the previous executed proposal P-6815.

BACKGROUND:

The Task 2 proposed activities described herein are based on the results of Task 1 activities (pursuant to proposal P-6815) and CEI's review of several reports prepared by STS Consultants Ltd. (STS) which documented environmental work completed at the above-referenced sites. Please note, Task 2, as proposed in proposal P-6815, has not been conducted (with the exception of limited report preparation) and is further revised in this proposal P-6918.

The following has been conducted by CEI and is described as Task 1:

- Soil trenching activities were completed to evaluate near surface contamination potentially migrating off-site via the underground utility lines. This was completed by trenching along and beneath the site utilities at various locations. Twelve soil samples (TS-1 through TS-12) were collected and analyzed.

- Subsequent to the trenching activities, CEI emplaced nine soil borings (SB-500 through SB-508) to a maximum depth of approximately 25 feet bgs. The soil borings were subsequently converted to ground water monitoring wells (MW-500S through MW-508S). Soil samples were collected and analyzed to evaluate the potential for off-site *shallow* contamination. The monitoring wells were installed to confirm that *shallow* (perched) ground water is limited

to the area in the vicinity of the subject building. In addition, the *shallow* borings / wells were installed to evaluate whether "deeper" borings and/or wells will need to be double-cased to protect the lower aquifer from potential cross contamination from the upper perched ground water condition.

A total of nine soil samples (one from each soil boring) were collected from soil borings SB-500 through SB-508. Only one shallow monitoring well installed produced ground water (MW-502S). As such, only one ground water sample was collected from the converted monitoring wells.

- Four additional soil borings (SB-510 through SB-512) were emplaced and sampled to evaluate the extent of potential soil contamination near STS soil boring B-125. Six soil samples were collected and analyzed from these four soil borings.

- Eight ground water samples were collected and analyzed from the previously installed monitoring wells. In addition, one monitoring well (MW-126) was resampled in November 1998 to confirm previous analytical results.

- Monitoring wells were surveyed to determine relative elevations for evaluating ground water elevation contours and the direction of ground water flow.

Based on the investigations completed to date, further definition of the soil and ground water contamination will be required by the IEPA. The complete delineation of the soil contamination will better allow CEI to evaluate the area and volume of contaminated soil requiring remediation. It is CEI's intent to investigate the potential downward migration of contamination from previous soil sampling and monitoring well emplacement. In addition, the proposed investigation will better delineate potential off-site ground water impacts at the southern portion of the property.

Please note, the lateral extent of perched ground water contamination has been defined to the south, west and north. However, monitoring wells have not been installed and are not proposed within the interior of the building to delineate the actual lateral area and extent of perched ground water contamination under the site building. CEI also notes that borings emplaced to the east, southeast and northeast of the site building did not encounter perched ground water.

In general, CEI proposes the following revised Task 2 activities:

- Emplacing a total of 22 additional soil borings with the collection of various analytical soil samples at designated depth intervals.

- Installing nine additional *deep* ground water monitoring wells to approximate depths of 70 feet below grade surface (bgs). Both soil samples and ground water samples will be collected for analysis. Please refer to the Scope of Services below for precise sampling information. Pursuant to discussions with Lockformer, field work associated with Task 2 as proposed will commence prior to obtaining approval from the Illinois Environmental Protection Agency (IEPA) Site Remediation Program (SRP) Project Manager (PM). However, CEI will contact the PM to allow him to be present during the field activities. In addition, CEI will forward the proposed scope of work to the IEPA PM and solicit any additional comments and/or requirements to the proposed scope of work.

SCOPE OF SERVICES:

CEI proposes to complete Revised Task 2 Additional Subsurface Soil and Ground Water Investigation as follows:

- **Soil Investigation:** Includes the emplacement of 22 additional *deep* soil borings at depths ranging from 50 to 70 feet bgs and the collection of analytical soil samples at various depth intervals. Figure 1 depicts the proposed sampling locations (A through V) and initial soil sampling depth intervals. Please note, if sampling is proposed below a depth of 20 feet bgs in the vicinity of shallow ground water contamination, the borings will be double cased, as described below. Also note that "blind" drilling will be conducted to either 10 feet, 20 feet, 25 feet and/or 30 feet bgs at areas where shallow sampling is not required.

- **Ground Water Investigation:** Includes the emplacement of nine borings and the subsequent conversion to *deep* ground water monitoring wells, of which, four will be nested wells adjacent to shallow wells MW-500S, MW-501S, MW-504S, MW-508S previously installed as part of Task 1. The additional five wells will be depicted as MW-513D through MW-517D. The additional monitoring well locations are depicted on Figure 2. At least one soil and ground water sample will be collected

from each proposed soil boring / monitoring well location. Please note, if sampling is proposed in the vicinity of shallow ground water contamination, the borings will be double cased, as described below. Also note that "blind" drilling will be conducted to 25 feet bgs at areas where shallow sampling is not required.

Soil Sampling

The final placement of the borehole locations is dependent on field observations and physical constraints, and will be determined during the field activities; however, the locations as depicted on Figure 1 will be closely regarded. The final sampling depths of the boreholes will be based on whether contamination was identified at a similar depth in the vicinity of the borehole and/or the field screening and the existence of visual evidence of contamination, if present.

In general, soil borings will be emplaced to a depth of 20 feet bgs using a truck-mounted GeoProbe® hydraulic soil probe unit. The GeoProbe® system is equipped with a pneumatic hammer device capable of driving a sampling system into the subsurface. The system consists of 4-foot long soil sampling spoons which are lined with a cellulose acetate butyrate (CAB) sleeve. A new CAB liner sleeve will be used for each sample. Between each sampling location, all sampling tools will be scrubbed with an Alconox® solution and rinsed with distilled water to ensure that no cross-contamination will occur between samples and/or sampling locations. Initial GeoProbe® sampling is planned at 17 of the 22 soil borings locations (A through Q). Because of the dense geological materials below a depth of 20 feet, soil borings will continue using a drill rig equipped with hollow stem augers. Soil samples will be collected with a 24-inch stainless steel split spoon. Between each boring and sample, the augers and split spoon will be cleaned with an Alconox® soap and water solution and rinsed with distilled water.

CEI notes, in order to prevent possible contamination of the lower aquifer by contaminants found in the upper aquifer, various soil borings may need to be emplaced using a double-cased method. Refer to the Ground Water Sampling section below for additional information on the double-cased method.

Soil boreholes (A through I) will be continuously sampled from the surface and the geological material will be visually classified. Soil boreholes (J through Q) will be continuously sampled from approximately 10 feet bgs, soil boreholes (R through T) will be continuously sampled from approximately 20 feet bgs and soil boreholes (U and V) will be continuously sampled from approximately 30 feet bgs. In addition, the nine soil borings advanced for the subsequent conversion to monitoring wells will be sampled beginning at approximately 25 feet bgs. Please refer to Table

1 for the approximate sampling intervals. Soil samples from each borehole will be examined for visual evidence of contamination and screened with a photoionization detector (PID). The PID is an effective device for identifying areas where volatile organic compounds (e.g., oils, solvents, gasoline constituents) may exist. However, it does not identify specific compounds or their concentrations. Initial results from the PID screening program and field observations will be summarized on soil borehole logs.

All soil samples will be placed in clean 2-ounce glass jars with Teflon-lined lids. The samples will be maintained at a temperature of approximately 4°C on ice, in an insulated container. Upon completion of the sampling, selected samples will be shipped to a designated analytical laboratory for chemical analysis. Based on the proposed sampling scheme, a total of 107 soil samples from the soil borings will be chemically analyzed for volatile organic compounds (VOCs). All samples will be maintained under standard chain-of-custody procedures. All samples will be analyzed on a normal one-week turn-around basis.

Monitoring Well Installation and Ground Water Sampling

Each of the ground water monitoring well installations will include first emplacing and sampling a soil boring using the method described above, then converting the boring into a well. The ground water monitoring wells will each be installed to an estimated average depth of approximately 70 feet bgs, depending on the location of bedrock, with approximately 10 feet of well screen. The proposed locations and designations of the monitoring wells are shown on Figure 2 (MW-500D, MW-501D, MW-504D, MW-508D and MW-513 D through MW-517D).

As noted above, as long as the upper aquifer has not been significantly impacted by VOC contamination, a general single-cased well installation method can be used. This method involves a simple conversion of a completed soil boring to a well. All well casing material will be steam-cleaned prior to installation. The wells will be constructed using schedule-40 PVC risers and stainless steel number 10 slotted screen. Quartz sand will be placed around the screen to an elevation of 1 to 2 feet above the screen. A bentonite seal will be placed above the quartz sand to provide an impermeable seal in the borehole. In order to secure the wells, a locking flush-mounted or stick up steel well protector will be cemented around the top of each well. These wells will be permanent fixtures that can be used for future ground water monitoring activities, if needed.

However, if the upper aquifer has been significantly impacted by VOC contamination in the area where the monitoring well will be emplaced, a double-cased well installation method must be used in order to protect the lower aquifer from possible cross-contamination from the upper aquifer. This

method will be completed in accordance with Section 8.8.3 of ASTM's Practice D5092. It involves drilling a larger diameter boring through the upper aquifer and into the layer of low permeability that separates the two aquifers. A smaller diameter steel, conductor casing is then lowered into the boring. Next, the inside of the conductor casing, and the annular space between the outside of the conductor casing and the larger boring will be filled with grout using a tremie pipe. After this grouted casing has been allowed to set (a minimum of 12 hours), a smaller diameter boring will be emplaced down the center of the conductor casing, through the lower aquifer, and into the bedrock (estimated to be encountered between 40 and 80 feet bgs). Finally, the monitoring well will be installed to sample the lower aquifer using the method described above.

A minimum of twelve hours after installation, each ground water monitoring well (nine newly installed wells) will be developed using a stainless steel bailer or a purge pump. In addition, CEI will redevelop the eight existing ground water monitoring wells which are not dry. A minimum of three borehole volumes of water will be removed from each well during development. At least 48 hours after development, the wells will be sampled after three standing well volumes of water have been purged. CEI will also survey the wells and measure the static water levels to calculate the ground water flow direction. Slug testing will be conducted on at least 6 of the 17 wells to determine the hydraulic conductivity of the site soils in both aquifers.

All ground water samples will be placed in laboratory-prepared clean glass vials with Teflon-lined septa. Upon completion of the sampling, the ground water samples will be shipped to a designated analytical laboratory for chemical analysis. Based on the proposed sampling scheme, a total of 17 ground water samples from the monitoring wells will be chemically analyzed for VOCs. All samples will be maintained under standard chain-of-custody procedures. All samples will be analyzed on a normal one-week turn-around basis.

Laboratory Analyses

All samples will be analyzed using the U.S. Environmental Protection Agency's SW-846 Method 8260 for VOCs analysis. Sample preparation using Method 5035 may be used in addition to the above, if deemed applicable.

Table 1 shows the proposed sampling depth intervals which are anticipated. As shown on Table 1, a total of 97 soil samples will be collected from the 22 soil borings (A through V), a total of ten soil samples (one from each well, two from MW-515D) will be collected during the emplacement of borings that will be converted into monitoring wells. One ground water sample will be collected from each monitoring well (nine newly installed and eight existing), for a total of 17 ground water

samples. As noted above, all soil and ground water samples will be analyzed for VOCs using the method described above.

In addition, twelve soil samples collected at random, but providing equal representation for each of the estimated three, distinct layers of lithology (that STS reportedly encountered during previous investigations) will also be analyzed for total organic carbon (TOC). Lastly, one "trip" and one "equipment field" blank will be collected each day that other samples are collected and analyzed for VOCs to ensure that cross-contamination (either from field equipment or from other samples) has not occurred. Duplicate samples will be collected for at least 5% of the samples sent for analysis and analyzed for VOCs to ensure that the laboratory results are accurate. Based on the results of the laboratory analyses additional samples may need to be analyzed, at additional expense. *CEI will contact the Client for written permission prior to having any additional analyses performed.*

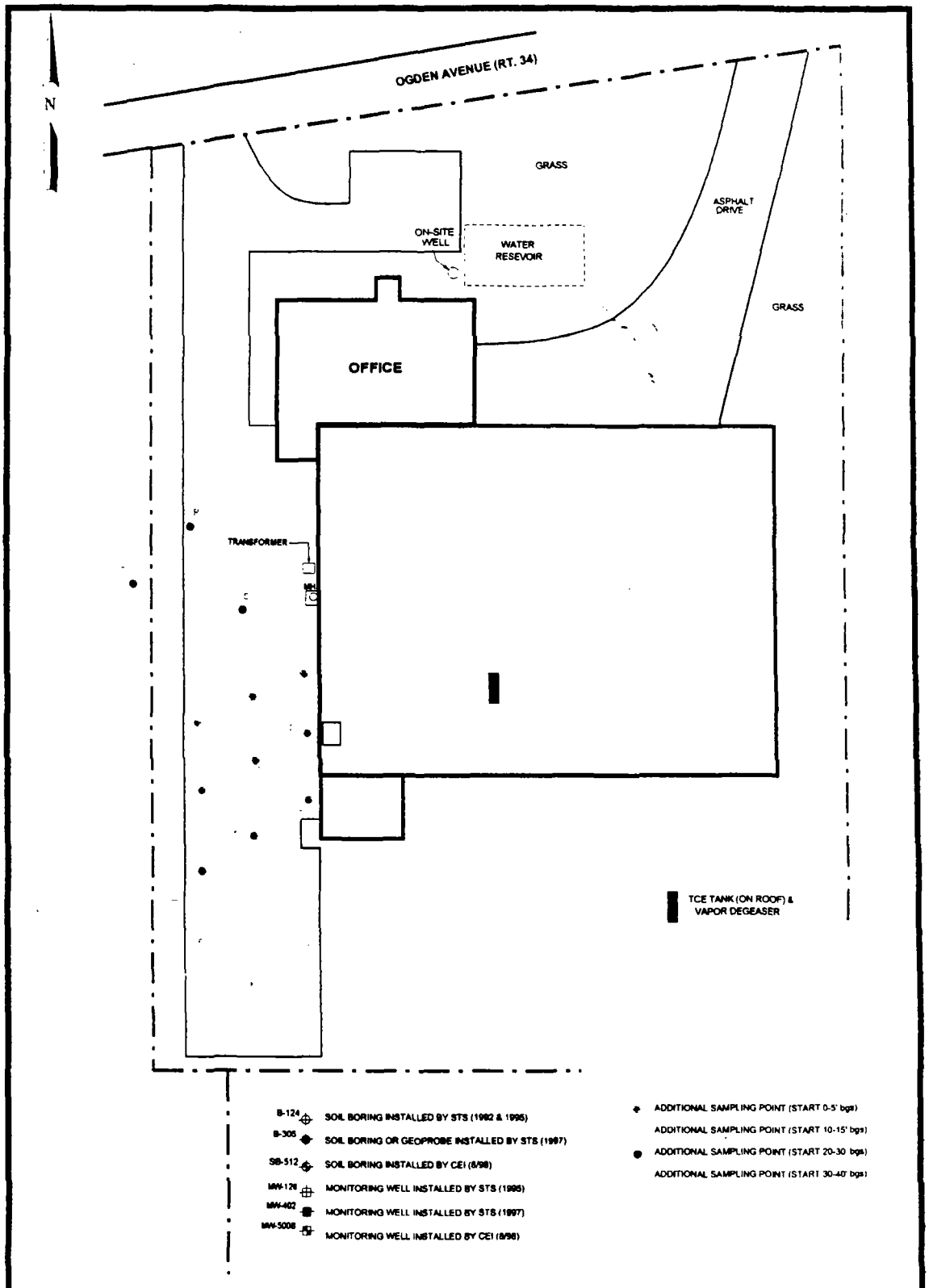
Other

Soil cuttings will be placed in 55-gallon steel drums and the boreholes will be filled with bentonite chips. *All the drums will be left at the site. If the soils are found to be contaminated, appropriate disposal will need to be arranged by the Client.* The drums requiring disposal will also need to be sampled for specific analyses required for acceptance to a landfill. All boreholes will be brought to grade with bentonite chips and finished with cement, if they are located in a paved area.

CEI will be able to conduct the investigations within two weeks of notice to proceed. A written report detailing the limited subsurface soil and ground water investigation will be available within four to six weeks of receipt of the final laboratory results.

It should be understood that investigative activities may be extended if subsurface obstructions are encountered or weather conditions inhibit field activities. Any time or material necessary to complete the project beyond the estimated scope of work outlined in this proposal will be charged on a "Time and Materials" basis according to CEI's standard rate schedule.

Prior to emplacing the boreholes, CEI will contact an underground utilities locating service to identify natural gas, electrical, cable, telephone and other underground utilities in the area to be drilled. The Client is responsible for arranging and providing access to the site and for informing CEI regarding the location of sewers, water mains and other utilities. CEI is not responsible for repairing property damage incurred during or as a result of drilling activities.



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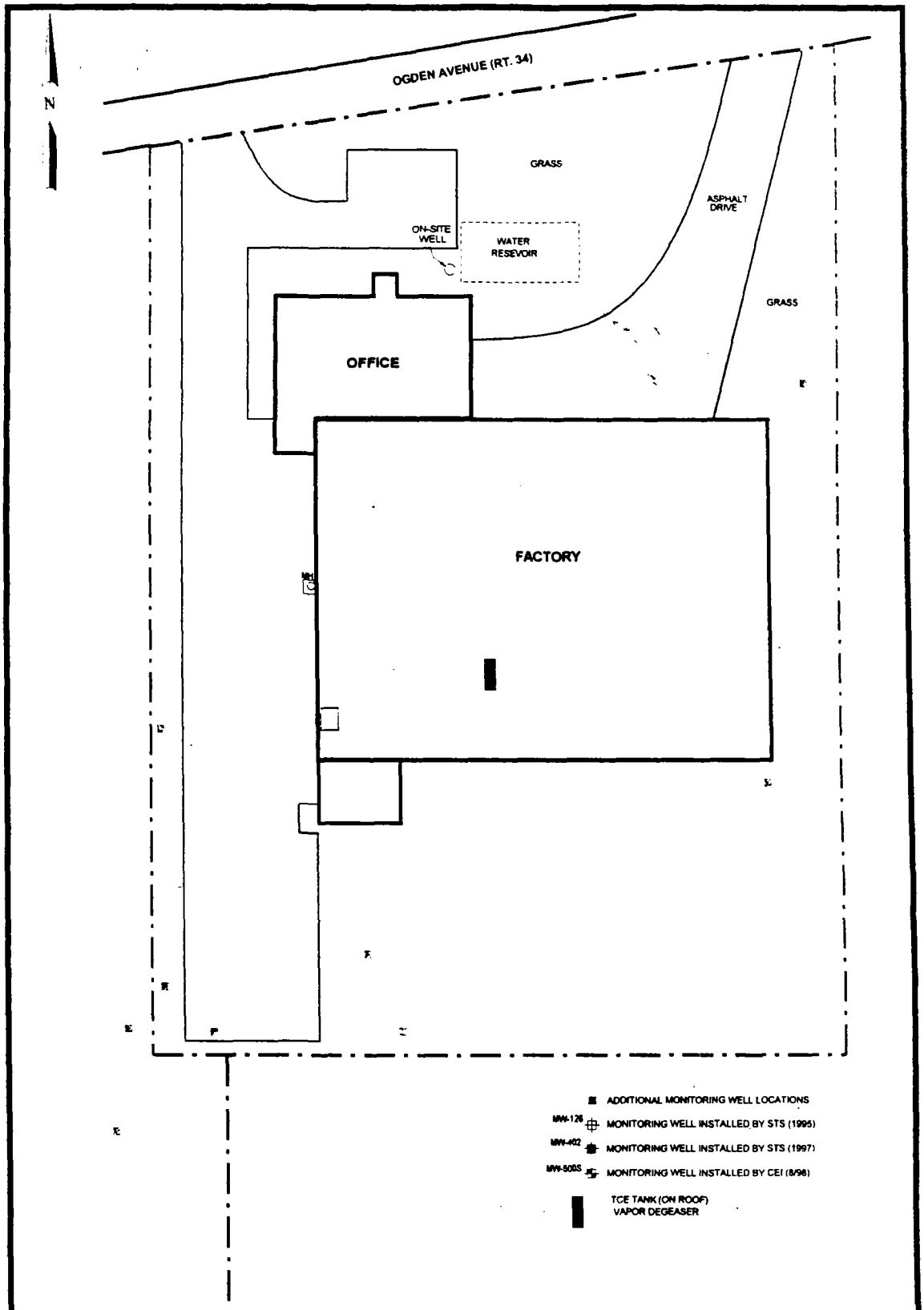
CARLSON ENVIRONMENTAL, INC.
312 W. RANDOLPH STREET
CHICAGO, ILLINOIS
(312) 346-2140

SCALE IN FEET
0 60

PROPOSED ADDITIONAL SOIL BORING LOCATIONS
711 OGDEN AVENUE
LISLE, ILLINOIS

DRAWN LPM	CHKD	SCALE AS SHOWN	FIGURE 1
DATE 01/19/99	DATE	PN# 9786A	



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ADDITIONAL MONITORING WELL LOCATIONS

711 OGDEN AVENUE
LISLE, ILLINOIS

DRAWN LPM	CHKD	SCALE: AS SHOWN	FIGURE: 2
DATE 11/17/98	DATE	PN#: 9788A	

TABLE 1

PROPOSED ADDITIONAL INTERVAL SOIL SAMPLING SCHEME

Lockformer - 711 Ogden Ave., Lisle, IL

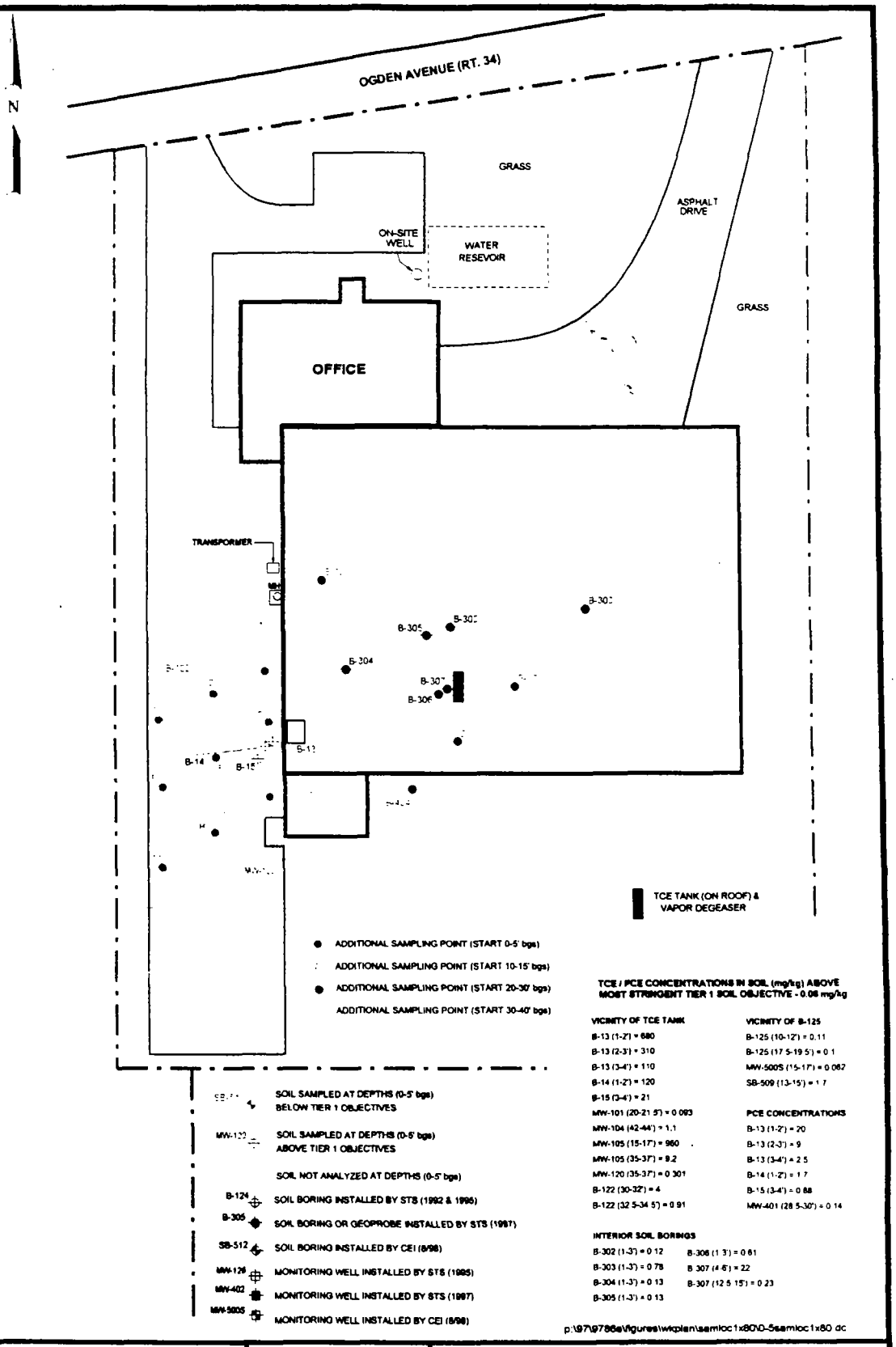
Sample Location Depth	Approximate Sampling Interval								# Samples
	0-5'	5-10'	10-15'	15-20'	20-30'	30-40'	40-50'	50+'	
Additional Soil Borings									
A	GEOPROBE				DRILL RIG				8
B	GEOPROBE				DRILL RIG				5
C	GEOPROBE				DRILL RIG				7
D	GEOPROBE				DRILL RIG				3
E	GEOPROBE				DRILL RIG				5
F	GEOPROBE				DRILL RIG				6
G	GEOPROBE				DRILL RIG				5
H	GEOPROBE				DRILL RIG				7
I	GEOPROBE				DRILL RIG				7
J	BLIND PROBE								5
K	BLIND PROBE								5
L	BLIND PROBE								5
M	BLIND PROBE				DRILL RIG				3
N	BLIND PROBE				DRILL RIG				4
O	BLIND PROBE				DRILL RIG				5
P	BLIND PROBE				DRILL RIG				3
Q	BLIND PROBE				DRILL RIG				5
R	BLIND DRILL				DRILL RIG				2
S	BLIND DRILL				DRILL RIG				3
T	BLIND DRILL				DRILL RIG				2
U	BLIND DRILL				DRILL RIG				1
V	BLIND DRILL				DRILL RIG				1
Monitoring Wells									97
MW-500D	BLIND DRILL				DRILL RIG			GW	2
MW-501D	BLIND DRILL				DRILL RIG			GW	2
MW-504D	BLIND DRILL				DRILL RIG			GW	2
MW-508D	BLIND DRILL				DRILL RIG			GW	2
MW-513D	BLIND DRILL				DRILL RIG			GW	2
MW-514D	BLIND DRILL				DRILL RIG			GW	2
MW-515D	BLIND DRILL				DRILL RIG			GW	3
MW-516D	BLIND DRILL				DRILL RIG			GW	2
MW-517D	BLIND DRILL				DRILL RIG			GW	2

NOTES:

	Begin soil sampling at 0-5'
	Begin soil sampling at 10-15'
	Begin soil sampling at 20-30'
	Begin soil sampling at 30-40'

Colors correspond to colors on Figures 1 and 2.

	19
Existing MW	8
Subtotal Analytical	124
Duplicates (5%)	6
Trip Blanks	15
Equipment	15
Total Analytical	160



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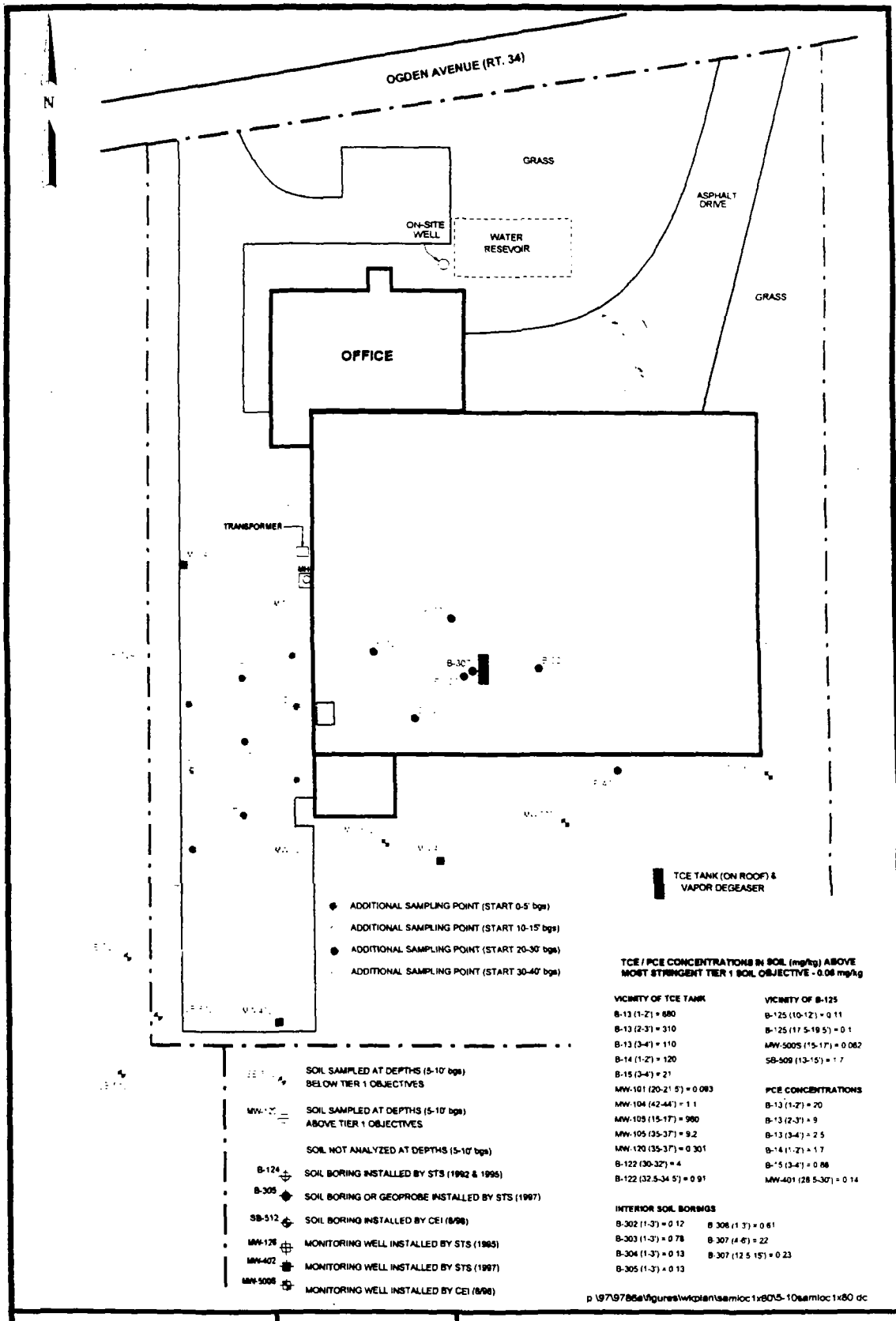
(312) 346-2140

SCALE IN FEET
0 80

ADDITIONAL SOIL SAMPLING (0-5' DEPTH INTERVAL)

711 OGDEN AVENUE
LISLE, ILLINOIS

DRAWN LPM	CHKD	SCALE 1" = 80'	FIGURE. 14A
DATE 12/07/98	DATE	PN# 9786A	



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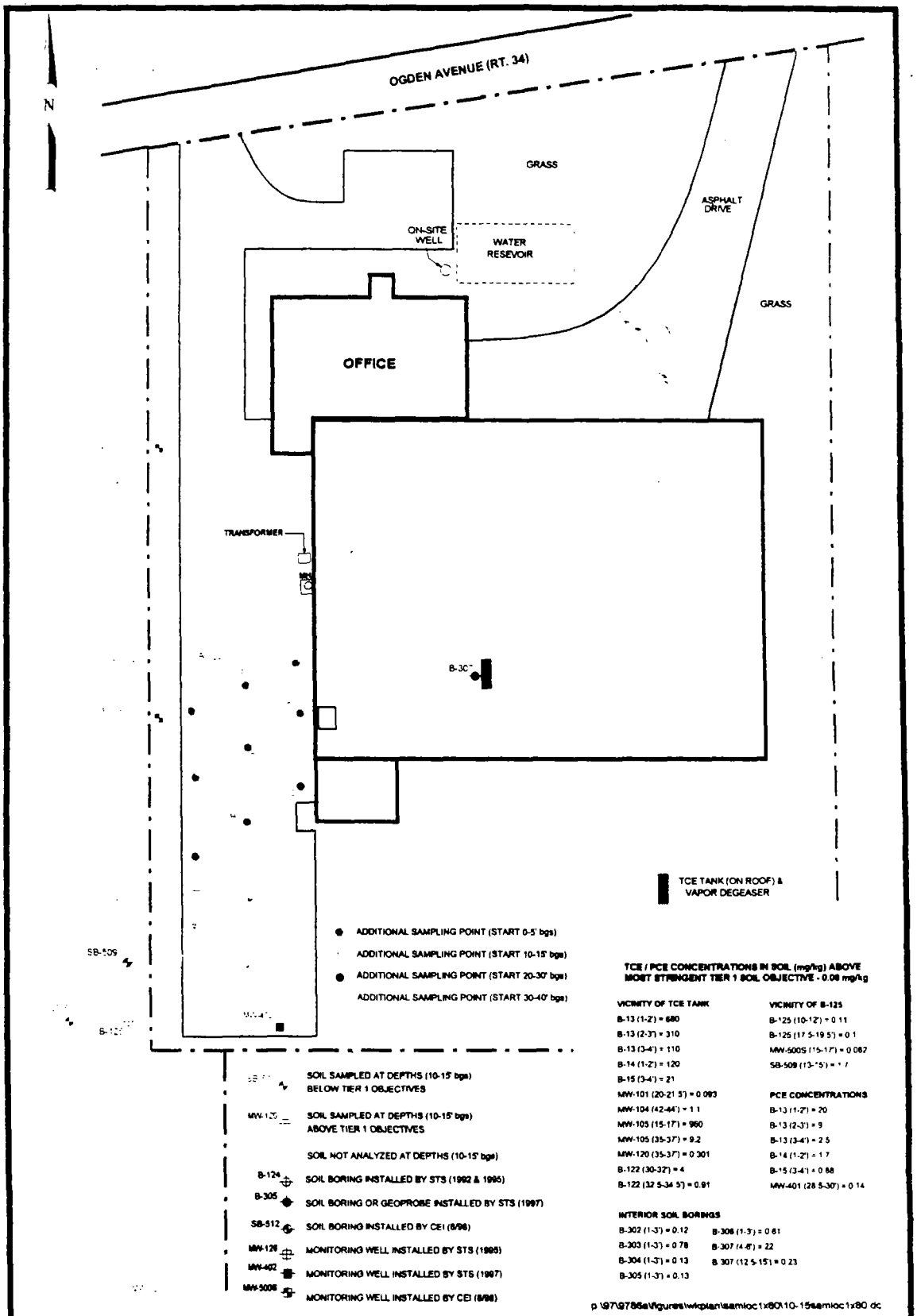
ADDITIONAL SOIL SAMPLING (5-10' DEPTH INTERVAL)

711 OGDEN AVENUE
LISLE, ILLINOIS

DRAWN LPM	CHKD	SCALE 1" = 80'	FIGURE. 14B
DATE 12/07/98	DATE	PN# 9786A	



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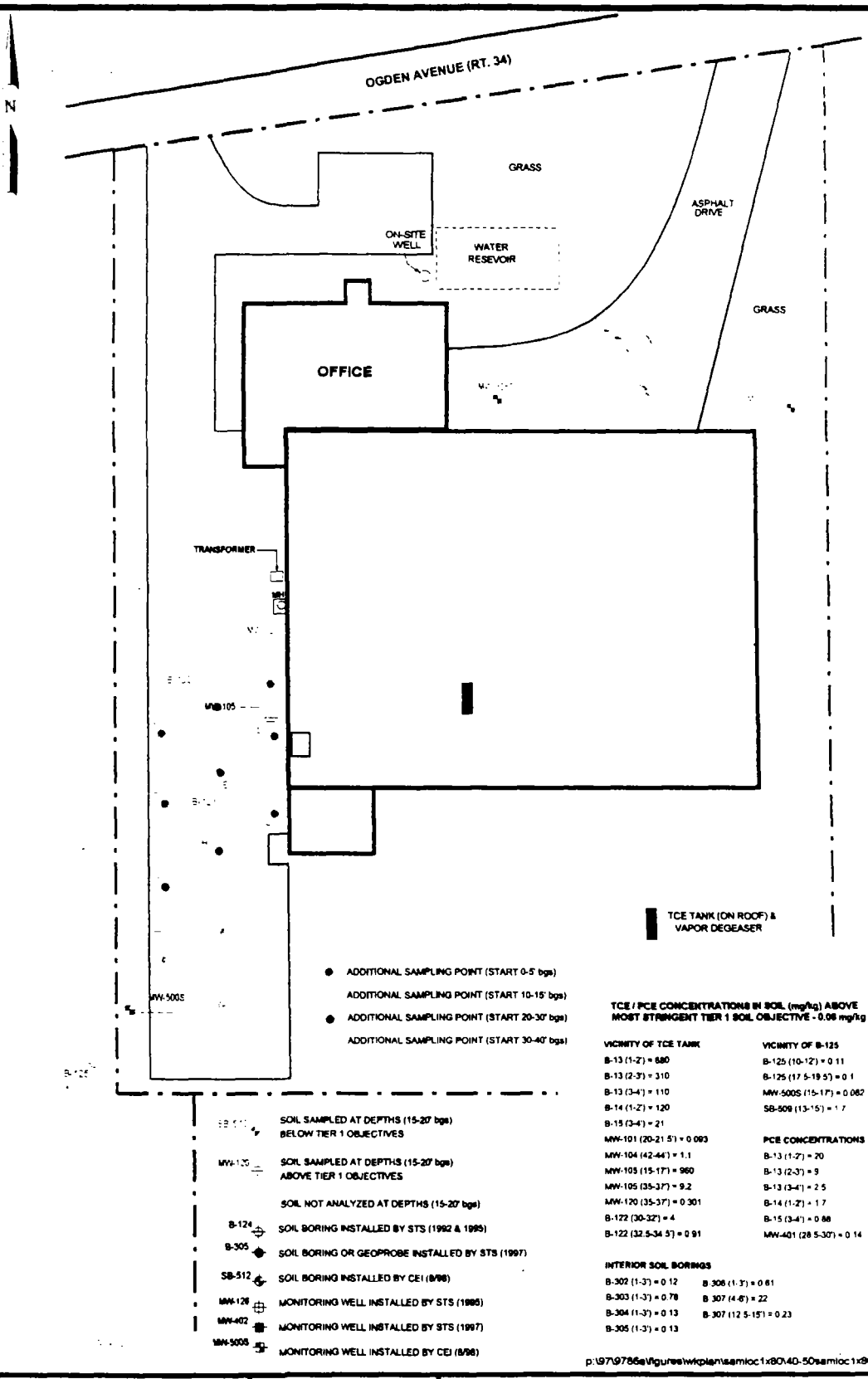
ADDITIONAL SOIL SAMPLING (10-15' DEPTH INTERVAL)

711 OGDEN AVENUE
LISLE, ILLINOIS

DRAWN LPM	CHKD	SCALE 1" = 80'	FIGURE 14C
DATE 12/07/98	DATE	PN# 9786A	



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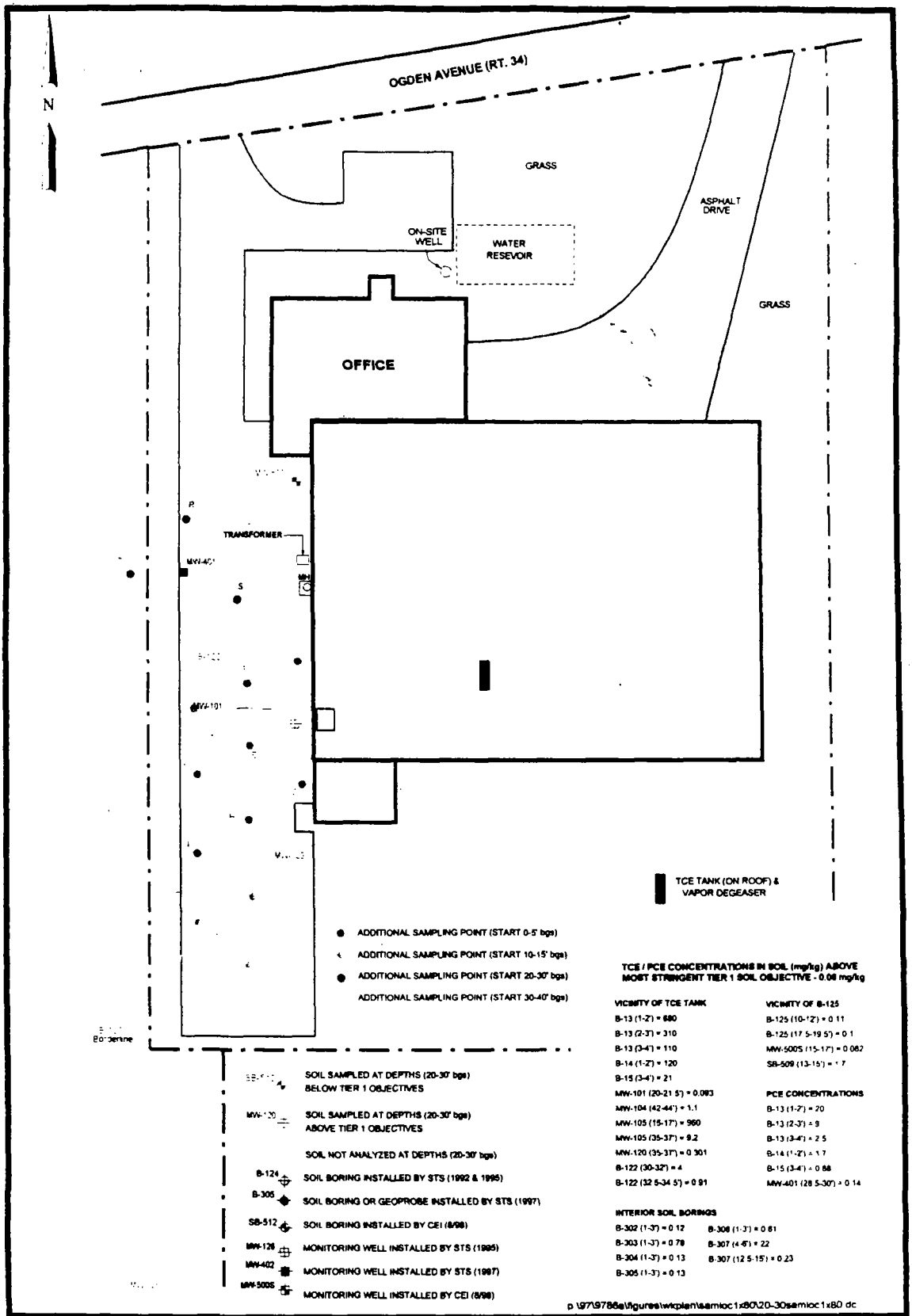
ADDITIONAL SOIL SAMPLING (15-20' DEPTH INTERVAL)

711 OGDEN AVENUE
LISLE, ILLINOIS

DRAWN LPM	CHKD	SCALE 1" = 80'	FIGURE: 14D
DATE 12/07/98	DATE	PN# 9786A	



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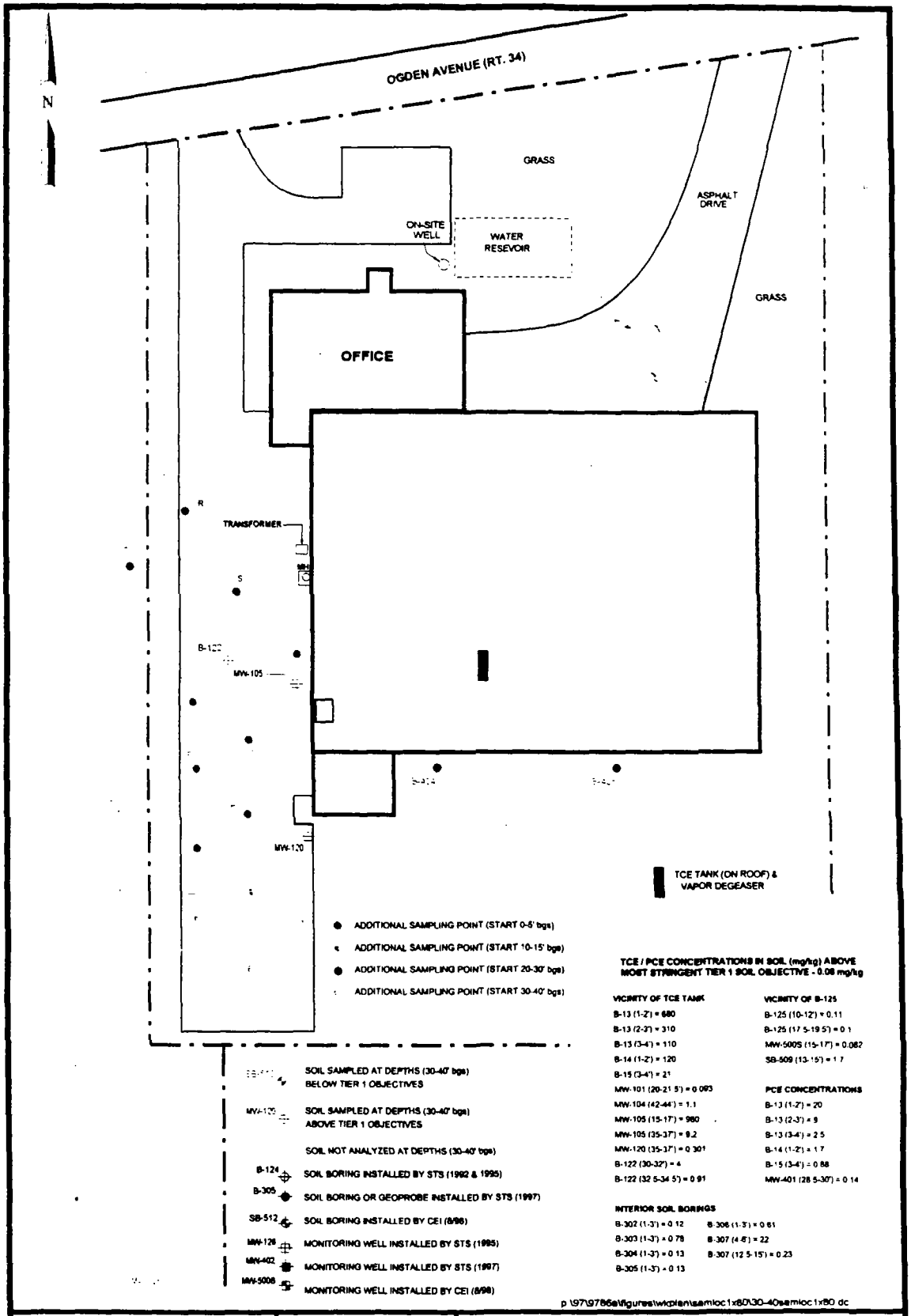
ADDITIONAL SOIL SAMPLING (20-30' DEPTH INTERVAL)

711 OGDEN AVENUE
LISLE, ILLINOIS

DRAWN LPM	CHKD	SCALE 1" = 80'	FIGURE 14E
DATE 12/07/98	DATE	PN# 9786A	



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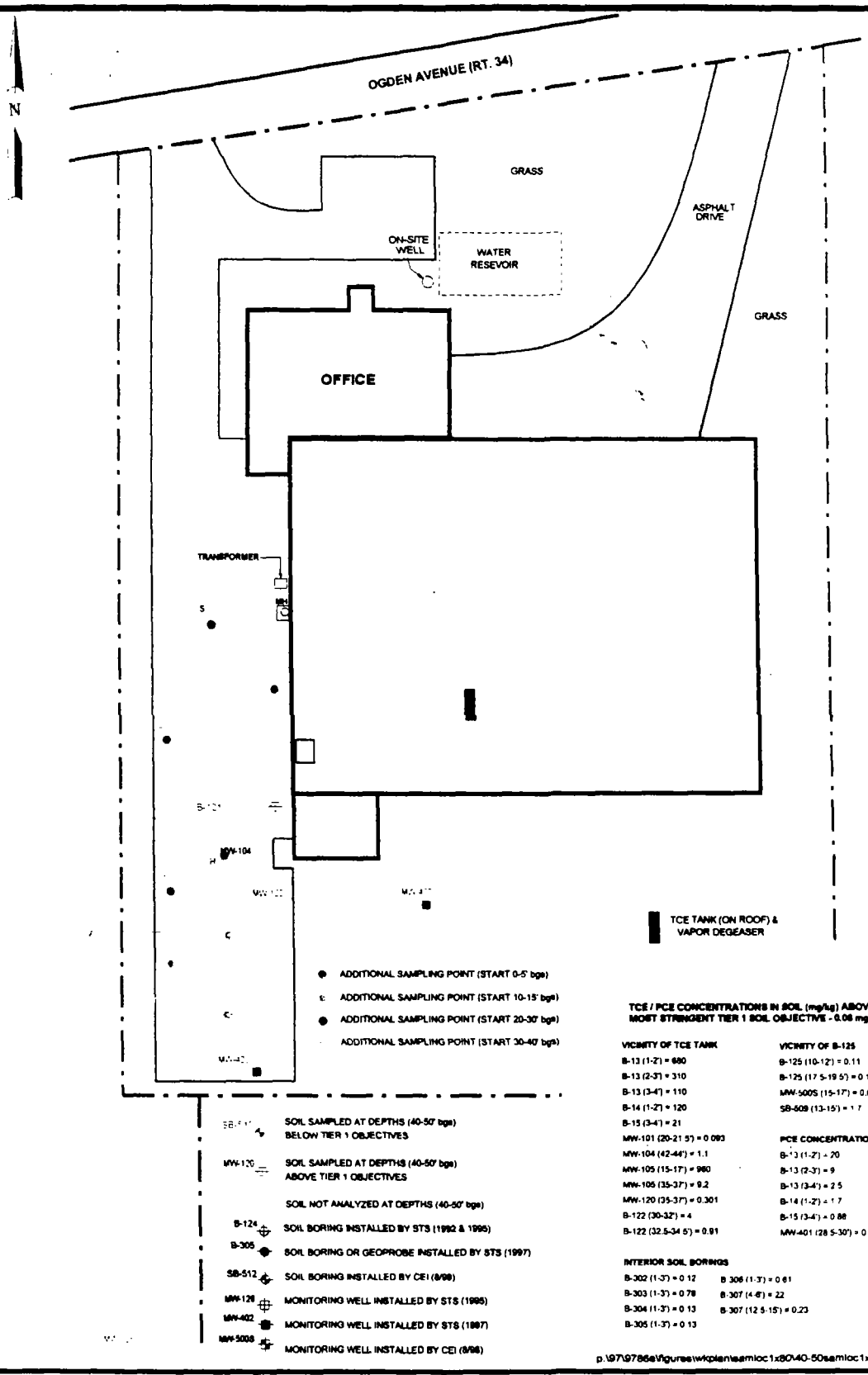
ADDITIONAL SOIL SAMPLING (30-40'DEPTH INTERVAL)

711 OGDEN AVENUE
LISLE, ILLINOIS

DRAWN LPM	CHKD.	SCALE 1" = 80'	FIGURE 14F
DATE 12/07/98	DATE	PN# 9786A	



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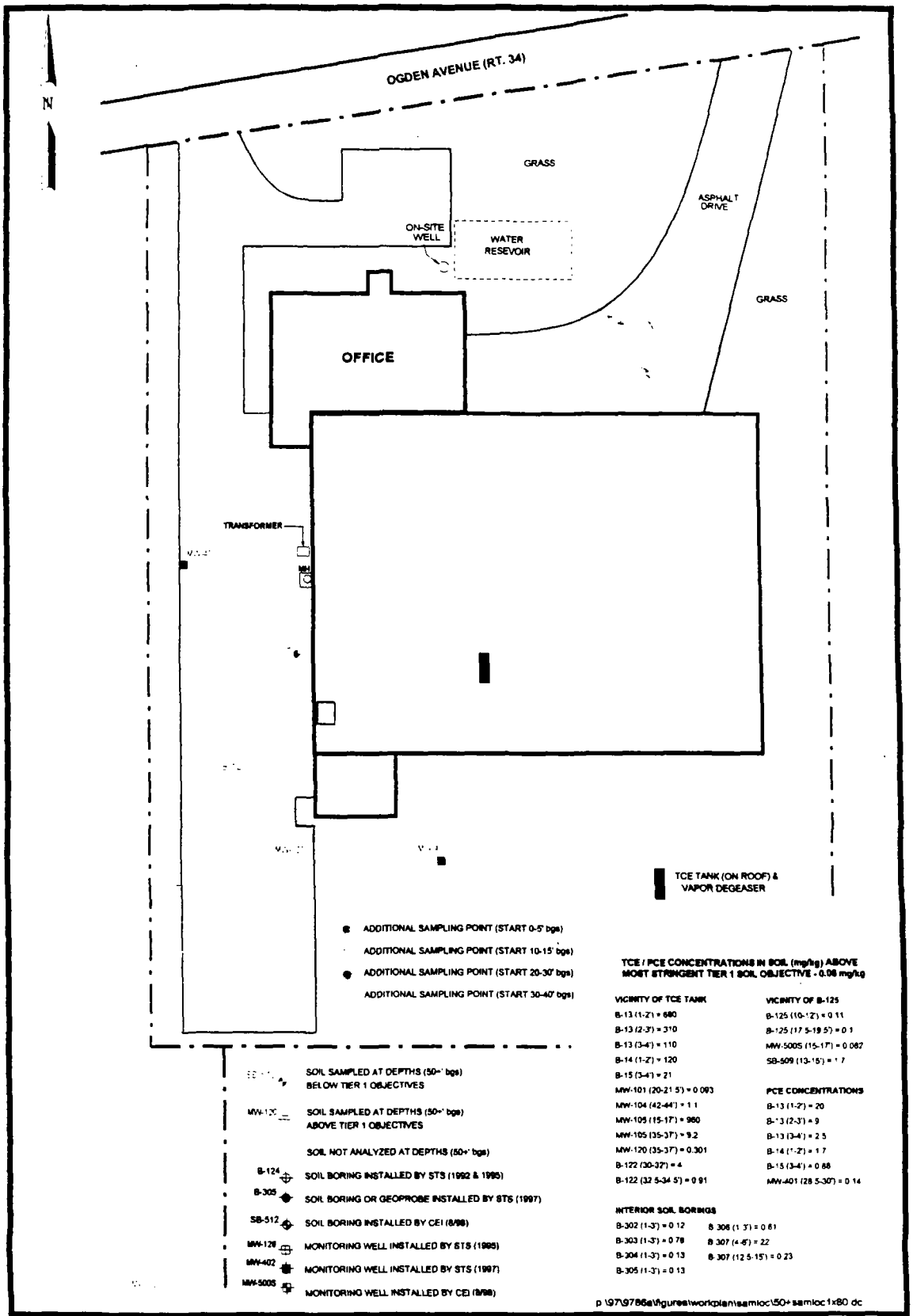
ADDITIONAL SOIL SAMPLING (40-50' DEPTH INTERVAL)

711 OGDEN AVENUE
LISLE, ILLINOIS

DRAWN LPM	CHKD	SCALE 1" = 80'	FIGURE: 14G
DATE 12/07/98	DATE	PN# 9786A	



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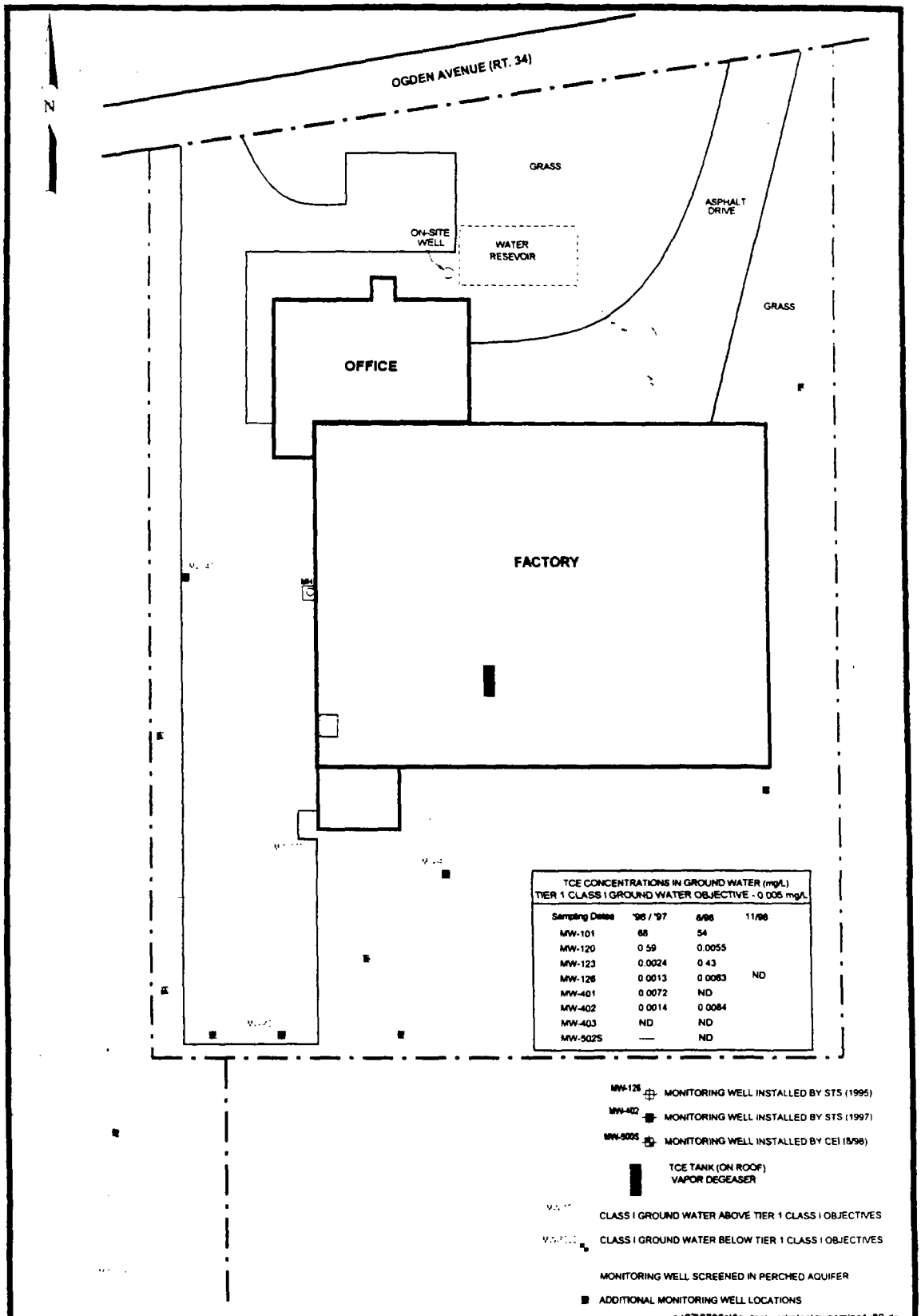
ADDITIONAL SOIL SAMPLING (50+' DEPTH INTERVAL)

711 OGDEN AVENUE
LISLE, ILLINOIS

DRAWN LPM	CHKD	SCALE 1" = 80'	FIGURE 14H
DATE 12/07/98	DATE	PN# 9786A	



TCE CONCENTRATIONS IN GROUND WATER (mg/L)
TIER 1 CLASS I GROUND WATER OBJECTIVE - 0.005 mg/L

Sampling Dates	'96 / '97	8/98	11/98
MW-101	68	54	
MW-120	0.59	0.0055	
MW-123	0.0024	0.43	
MW-126	0.0013	0.0063	ND
MW-401	0.0072	ND	
MW-402	0.0014	0.0084	
MW-403	ND	ND	
MW-502S	—	ND	

MW-126 MONITORING WELL INSTALLED BY STS (1995)

MW-402 MONITORING WELL INSTALLED BY STS (1997)

MW-502S MONITORING WELL INSTALLED BY CEI (8/98)

TCE TANK (ON ROOF)
VAPOR DEGEASER

CLASS I GROUND WATER ABOVE TIER 1 CLASS I OBJECTIVES

CLASS I GROUND WATER BELOW TIER 1 CLASS I OBJECTIVES

MONITORING WELL SCREENED IN PERCHED AQUIFER

ADDITIONAL MONITORING WELL LOCATIONS

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CARLSON ENVIRONMENTAL, INC.
312 W. RANDOLPH STREET
CHICAGO, ILLINOIS
(312) 346-2140

SCALE IN PEET
0 80

ADDITIONAL MONITORING WELL LOCATIONS
711 OGDEN AVENUE
LISLE, ILLINOIS

DRAWN LPM	CHKD	SCALE As shown	FIGURE: 15
DATE 11/17/98	DATE	PN# 9786A	

TABLE 6 - ANALYTICAL SOIL SUMMARY (SOIL BORINGS)

LOCKFORMER
711 Ogden Avenue - Lisle, Illinois

Sample Location / Depth	Date Sampled	Chemical Parameters Detected Above Class I Soil Objectives (mg/kg)			
		Trichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane
		0.06 [1]	0.06 [1]	2 [1]	0.02 [1]
		12 [2]	28 [2]	1,200 [2]	1,800 [2]
		8.9 [3]	20 [3]	1,200 [3]	1,800 [3]
Exterior Soil Borings					
B-13 / 1-2'	Apr-92	[redacted]	[redacted]	[redacted]	ND
B-13 / 2-3'	Apr-92	[redacted]	[redacted]	0.5	ND
B-13 / 3-4'	Apr-92	[redacted]	[redacted]	0.2	[redacted]
B-14 / 1-2'	Apr-92	[redacted]	[redacted]	0.31	ND
B-15 / 3-4'	Apr-92	[redacted]	[redacted]	0.11	ND
B-101 / 20-21.5'	Apr-95	[redacted]	ND	ND	ND
B-104 / 42-44'	Apr-95	[redacted]	ND	ND	ND
B-105 / 15-17'	Apr-95	[redacted]	ND	ND	ND
B-105 / 35-37'	Apr-95	[redacted]	ND	ND	ND
MW-120 / 4-4.5'	Apr-95	0.0111	ND	ND	ND
MW-120 / 7.5-9.5'	Apr-95	0.0241	ND	ND	ND
MW-120 / 20-22'	Apr-95	ND	ND	ND	ND
MW-120 / 35-37'	Apr-95	[redacted]	ND	ND	ND
MW-120 / 40-42'	Apr-95	0.0035	ND	ND	ND
MW-120 / 45-47'	Apr-95	ND	ND	ND	ND
MW-120 / 47-49'	Apr-95	ND	ND	ND	ND
MW-120 / 55.5-57.7'	Apr-95	0.0023	ND	ND	ND
B-121 / 17.5-19.5'	Apr-95	0.0024	ND	ND	ND
B-121 / 45-47'	Apr-95	0.025	ND	ND	ND
B-121 / 50-52'	Apr-95	0.0022	ND	ND	ND
B-121 / 55-57'	Apr-95	0.0024	ND	ND	ND
B-122 / 2.5-4.5'	May-95	ND	ND	ND	ND
B-122 / 10-12'	May-95	0.004	ND	ND	ND
B-122 / 15-17'	May-95	0.0019	0.001	ND	ND
B-122 / 20-22'	May-95	0.0016	ND	ND	ND
B-122 / 25-27'	May-95	ND	ND	ND	ND
B-122 / 30-32'	May-95	[redacted]	0.0052	ND	ND
B-122 / 32.5-34.5'	May-95	[redacted]	0.01	ND	ND
MW-123 / 5-7'	May-95	ND	ND	ND	ND
MW-123 / 7.5-9.5'	May-95	ND	ND	ND	ND
MW-123 / 15-17'	May-95	ND	ND	ND	ND
B-124 / 5-7'	May-95	0.0019	ND	ND	ND
B-124 / 7.5-9.5'	May-95	0.01	ND	ND	ND
B-124 / 10-12'	May-95	0.014	ND	ND	ND
B-124/ 12.5-14.5'	May-95	0.0015	ND	ND	ND
B-125 / 10-12'	May-95	[redacted]	ND	ND	ND
B-125 / 15-17'	May-95	0.052	ND	ND	ND
B-125 / 17.5-19.5'	May-95	[redacted]	0.0012	ND	ND
B-125 / 20-22'	May-95	0.059	ND	ND	ND
B-125 / 25-27'	May-95	0.058	0.001	ND	ND
MW-126 / 12.5-14.5'	May-96	ND	ND	ND	ND
MW-126 / 17.5-19.5'	May-96	0.028	ND	ND	ND
MW-126 / 20-22'	May-96	0.011	ND	ND	ND
MW-126 / 25-27'	May-96	0.013	ND	ND	ND
MW-126 / 35-37'	May-96	0.0058	ND	ND	ND
MW-126 / 50-52'	May-96	0.0058	0.0011	ND	ND
MW-126 / 65-67'	May-96	ND	ND	ND	ND
MW-126 / 70-72'	May-96	ND	0.0014	ND	ND
MW-126 / 75-77'	May-96	ND	0.0017	ND	ND
MW-401 / 6-7.5'	Aug-97	ND	ND	ND	ND
MW-401 / 28.5-30'	Aug-97	ND	[redacted]	ND	ND
MW-401 / 53.5-55'	Aug-97	ND	ND	ND	ND
MW-402 / 5-6.5'	Aug-97	ND	ND	ND	ND
MW-402 / 14-15'	Aug-97	ND	ND	ND	ND
MW-402 / 48.5-50'	Aug-97	ND	ND	ND	ND
MW-403 / 6-7.5'	Aug-97	ND	ND	ND	ND
MW-403 / 43.5-45'	Aug-97	ND	ND	ND	ND
MW-403 / 58.5-60'	Aug-97	ND	ND	ND	ND

TABLE 6 - ANALYTICAL SOIL SUMMARY (SOIL BORINGS)

LOCKFORMER
711 Ogden Avenue - Lisle, Illinois

Sample Location / Depth	Date Sampled	Chemical Parameters Detected Above Class I Soil Objectives (mg/kg)			
		Trichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane
		0.06 [1]	0.06 [1]	2 [1]	0.02 [1]
		12 [2]	28 [2]	1,200 [2]	1,800 [2]
		8.9 [3]	20 [3]	1,200 [3]	1,800 [3]
B-404 / 3.5-5'	Aug-97	ND	ND	ND	ND
B-404 / 38.5-40'	Aug-97	ND	ND	ND	ND
B-405 / 6-7.5'	Aug-97	ND	ND	ND	ND
B-405 / 33.5-35'	Aug-97	ND	ND	ND	ND
SB-500-MW-500S / 15-17'	Aug-98	[redacted]	ND	ND	ND
SB-501-MW-501S / 11-13'	Aug-98	ND	ND	ND	ND
SB-502-MW-502S / 7-9'	Aug-98	ND	ND	ND	ND
SB-503-MW-503S / 7-9'	Aug-98	ND	ND	ND	ND
SB-504-MW-504S / 5-7'	Aug-98	ND	ND	ND	ND
SB-505-MW-505S / 15-17'	Aug-98	ND	ND	ND	ND
SB-506-MW-506S / 11-13'	Aug-98	ND	0.0054	ND	ND
SB-507-MW-507S / 23-25'	Aug-98	0.0088	ND	ND	ND
SB-508-MW-508S / 17-19'	Aug-98	0.0033	0.014	ND	ND
SB-509 / 9-11'	Aug-98	0.011	ND	ND	ND
SB-509 / 13-15'	Aug-98	[redacted]	0.005	0.0032	ND
SB-510 / 9-11'	Aug-98	0.013	ND	ND	ND
SB-511 / 11-13'	Aug-98	ND	ND	ND	ND
SB-512 / 9-11'	Aug-98	0.0029	ND	ND	ND
Interior Soil Borings					
B-301 / 1-3.5'	Jul-97	0.0097	ND	ND	ND
B-302 / 1-3'	Jul-97	[redacted]	ND	ND	ND
B-303 / 1-3'	Jul-97	[redacted]	ND	ND	ND
B-304 / 1-3'	Jul-97	[redacted]	ND	ND	ND
B-304 / 7-9'	Jul-97	ND	ND	ND	ND
B-305 / 1-3'	Jul-97	[redacted]	ND	ND	ND
B-305 / 8-10'	Jul-97	ND	ND	ND	ND
B-306 / 1-3'	Jul-97	[redacted]	ND	ND	ND
B-306 / 8-10'	Jul-97	ND	ND	ND	ND
B-307 / 4-6'	Jul-97	[redacted]	ND	ND	ND
B-307 / 12.5-15'	Jul-97	[redacted]	ND	ND	ND
B-308 / 1-5'	Jul-97	0.012	ND	ND	ND
B-308 / 8-10'	Jul-97	0.0068	ND	ND	ND
B-309 / 5.5-8'	Jul-97	ND	ND	ND	ND
B-310 / 1-3'	Jul-97	ND	ND	ND	ND

NOTES:

[1] - Tiered Approach to Corrective Action Objectives (TACO):(35 IAC, Part 742)-Appendix B: Table B: Tier 1 Class 1 Migration to Ground Water Remediation Objectives (Industrial / Commercial Properties)

[2] - TACO - Appendix B: Table B. Tier 1 Exposure Route-Specific Values for Soils for Construction Workers (most stringent inhalation or ingestion objective is listed) (Industrial / Commercial Properties).

[3] - TACO - Appendix B: Table B. Tier 1 Exposure Route-Specific Values for Soils Industrial / Commercial (most stringent inhalation or ingestion objective is listed).

ND - Not detected.

Shading indicates concentration is above most stringent remediation objectives listed.

Only those compounds detected above their corresponding remediation objective are listed on this table.

mg/kg: milligram per kilogram; parts per million (ppm)

TABLE 7 - ANALYTICAL GROUND WATER SUMMARY

LOCKFORMER
711 Ogden Avenue - Lisle, Illinois

Montoring Well Locations	Date Sampled	Chemical Parameters Detected Above Class I Ground Water Objectives (mg/L)											
		Benzene	Chloroform	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride
		0.005 [1]	0.00002 [1]	0.005 [1]	0.007 [1]	0.07 [1]	0.1 [1]	0.005 [1]	0.005 [1]	0.2 [1]	0.005 [1]	0.005 [1]	0.002 [1]
STS Monitoring Wells													
MW-101	Nov-96	0.0046	[illegible]	ND	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ND	[illegible]	[illegible]	[illegible]
MW-101	Aug-98	ND	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MW-120	Nov-96	ND	ND	ND	ND	[illegible]	0.0035	ND	ND	ND	ND	[illegible]	ND
MW-120	Aug-98	ND	ND	ND	ND	[illegible]	ND	[illegible]	ND	ND	ND	[illegible]	ND
MW-123	Nov-96	ND	ND	ND	ND	0.0022	ND	ND	ND	ND	ND	0.0024	ND
MW-123	Aug-98	[illegible]	ND	ND	0.0034	[illegible]	0.0035	0.0033	ND	0.033	ND	[illegible]	ND
MW-126	Nov-97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0013	ND
MW-126	Aug-98	ND	ND	ND	ND	ND	ND	0.0049	ND	ND	ND	[illegible]	ND
MW-126	Nov-98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-401	Aug-97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	[illegible]	ND
MW-401	Aug-98	ND	ND	ND	ND	ND	ND	0.0042	ND	ND	ND	ND	ND
MW-402	Aug-97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0014	ND
MW-402	Aug-98	ND	ND	ND	ND	[illegible]	0.0083	0.0029	ND	ND	ND	[illegible]	ND
MW-403	Aug-97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-403	Aug-98	ND	ND	ND	ND	ND	ND	0.0046	ND	ND	ND	ND	ND
MW-104 - DRY	Apr-95												
MW-104 - DRY	Aug-98												
MW-105 - DRY	Apr-95												
MW-106 - DRY	Aug-98												
CEI Monitoring Wells													
MW-500S - DRY	Aug-98												
MW-501S - DRY	Aug-98												
MW-502S	Sep-98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-503S - DRY	Aug-98												
MW-504S - DRY	Aug-98												
MW-505S - DRY	Aug-98												
MW-506S - DRY	Aug-98												
MW-507S - DRY	Aug-98												
MW-508S - DRY	Aug-98												

NOTES:

[1] - Tiered Approach to Corrective Action Objectives (TACO) (35 IAC, Part 742)-Appendix B, Table E Tier 1 Ground Water Remediation Objectives (Class I listed)

ND - Not detected

Shading indicates concentration is above Class I remediation objectives

Only those compounds detected above corresponding objectives are listed on this table

mg/L - milligram per liter, parts per million (ppm)